

CLAIMS

1. A manufacturing apparatus for a porous glass base material, comprising:
 - a burner repeatedly reciprocating moving back and forth in a direction along a longitudinal direction of an axially axis-rotating base member glass rod, the burner ejecting and depositing glass particles onto the base member glass rod; and
 - an exhaust hood positioned above a porous glass soot formed by the deposition of the glass particles, the exhaust hood repeatedly reciprocating moving back and forth in the a same direction as the burner in synchronization with the burner, wherein
 - the exhaust hood surrounds a portion of the porous glass soot corresponding to an angle θ of 100° or more with respect to a central axis an axial center of the porous glass soot.
2. The manufacturing apparatus according to Claim 1, wherein
 - the angle θ is 180° or more with respect to the axial centerthe central axis of the porous glass soot.
3. The manufacturing apparatus according to Claim 1, wherein
 - the exhaust hood is positioned so as to oppose the burner with the porous glass soot therebetween.
4. The manufacturing apparatus according to Claim 1, wherein
 - a folding mechanism is provided on an upper surface of the exhaust hood to adjust the angle θ .
5. The manufacturing apparatus according to one of Claims 1 to 4, wherein
 - an edge surface of an opening of the exhaust hood is formed by a curved surface.
6. A manufacturing apparatus of a porous glass base material, comprising:
 - a burner repeatedly moving back and forth reciprocating in a direction along a longitudinal direction of an axis-rotating base member glass rod, the burner ejecting and depositing glass particles onto the base member glass rod; and
 - an exhaust hood positioned above a porous glass soot formed by the deposition of the glass particles, the exhaust hood repeatedly moving back and forthreciprocating in a same direction as the burner in synchronization with the burner, wherein

$0 < r/R \leq 1.5$, when r denotes an offset between (i) an extended line of a line connecting a central axis of the burner and an axial centera central axis of the porous glass soot and (ii) a central axis line of an exhaust pipe of the exhaust hood which is parallel to the extended line, and R denotes a radius of the exhaust pipe.

7. The manufacturing apparatus according to Claim 6, wherein
the exhaust pipe is positioned higher in a vertical direction.

8. A glass base material for an optical fiber, manufactured in such a manner that a porous glass base material is formed by using the manufacturing apparatus according to one of Claims 1 to 7, and heated at a high temperature to be sintered and vitrified into a transparent glass.